



No. TN0080314

Authorization to discharge under the
National Pollutant Discharge Elimination System (NPDES)

Issued By

**Tennessee Department of Environment and Conservation
Division of Water Pollution Control
401 Church Street
6th Floor, L & C Annex
Nashville, Tennessee 37243-1534**

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the delegation of authority from the United States Environmental Protection Agency under the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251, et seq.)

Discharger: **Ft. Campbell**

is authorized to discharge: **Storm water runoff from outfalls SW1 through SW16**

from a facility located: **in Montgomery County, Tennessee**

to receiving waters named: **Fletcher's Fork and Little West Fork Creeks**

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on: **April 1, 2008**

This permit shall expire on: **February 28, 2013**

Issuance date: **February 29, 2008**

Paul E. Davis, Director
Division of Water Pollution Control

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PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Ft. Campbell is authorized to discharge storm water runoff associated with construction activities to Fletcher's Fork and Little West Fork Creeks.

The storm water discharges shall be monitored by the permittee as specified below:

PERMIT						
For outfalls SW1 through SW16						
EFFLUENT CHARACTERISTIC	EFFLUENT GUIDELINES				MONITORING REQUIREMENTS	
	MONTHLY		DAILY		MSRMNT. FRQNCY.	SAMPLE TYPE
	AVG. CONC.	AVG. AMNT.	MAX. CONC.	MAX. AMNT.		
	(mg/l)	(lb/day)	(mg/l)	(lb/day)		
FLOW	Report (MGD) *		Report (MGD) *		Semi-annually	Estimate
pH**	REPORT				Semi-annually	Grab
FLOATING MATERIAL, COLOR, FOAM OR OIL SHEEN	REPORT				Semi-annually	Visual
TOTAL SUSPENDED SOLIDS (TSS)		--	REPORT	--	Semi-annually	Grab

(1) Only storm water outfalls from active construction sites will be sampled during this permit

* Flow shall be reported in Million Gallons per Day (MGD).

** pH analyses shall be performed within fifteen (15) minutes of sample collection.

There shall be no distinctly visible floating scum, oil or other matter contained in the storm water discharges. The discharges must not cause an objectionable color contrast in the receiving stream.

The storm water discharges shall not contain pollutants in quantities that will be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream.

Qualified third party personnel who have taken and successfully completed the Level I EPSC course will conduct the twice weekly inspection of each of the retention, or settling basins, associated with each storm water outfall and all other BMPs (best management practices).

B. MONITORING PROCEDURES

The permittee shall have on site a recording rain gauge. A log shall be kept of all rainfall events.

1. Representative Sampling

Samples and measurements taken in compliance with the monitoring requirements specified herein shall be representative of the volume and nature of the monitored discharge, and shall be taken after treatment and prior to mixing with uncontaminated storm water runoff or the receiving stream. Samples must be taken only from storm water outfalls associated with active construction sites.

2. Sampling Frequency

The sampling frequency is once every six months for each storm water outfall for active construction sites. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted.

3. Test Procedures

- a.** Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304 (h) of the Clean Water Act (the "Act"), as amended, under which such procedures may be required.
- b.** Unless otherwise noted in the permit, all pollutant parameters shall be determined according to methods prescribed in Title 40, CFR Part 136, as amended, promulgated pursuant to Section 304 (h) of the Act.

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a.** The exact place, date and time of sampling;
- b.** The exact person(s) collecting samples;
- c.** The dates and times the analyses were performed;
- d.** The person(s) or laboratory who performed the analyses;
- e.** The analytical techniques or methods used, and;
- f.** The results of all required analyses.
- g.** The rainfall measurement for the sample event.
- h.** Estimate of discharge volume in million of gallons per day (MGD)

5. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation shall be retained for a minimum of three (3) years, or longer, if requested by the Division of Water Pollution Control.

C. DEFINITIONS

The **Monthly Average Concentration**, a limitation on the discharge concentration, in milligrams per liter (mg/L), is the arithmetic mean of all daily concentrations determined in a one calendar month period. For the purpose of this definition, a frequency of 2/Month is representative of 2 separate daily samples, each sample having been collected on a separate day during the monitoring period.

A **Grab Sample**, for the purposes of this permit, is defined as a single effluent sample of at least 100 milliliters (sample volumes <100 milliliters are allowed when specified per standard methods, latest edition) collected at a randomly selected time over a period not exceeding 15 minutes. The sample(s) shall be collected at the period(s) most representative of the total discharge.

For the purpose of this permit, a **Calendar Day** is defined as any 24-hour period.

For the purpose of this permit, **Semi-annually** means the same as "once every six months." Measurements of the effluent characteristics concentrations may be made anytime during a 6 month period beginning from the issuance date of this permit so long as the second set of measurements for a given 12 month period are made approximately 6 months subsequent to that time, if feasible.

For the purpose of this permit, **Annually** is defined as a monitoring frequency of once every twelve (12) months beginning with the date of issuance of this permit so long as the following set of measurements for a given 12 month period are made approximately 12 months subsequent to that time.

Dry Weather Flow shall be construed to represent discharges consisting of process and/or non-process wastewater only.

"Operator" for the purpose of this permit means any person associated with this project that meets either of the following two criteria:

- a) This person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person is typically the owner or developer of the project or a portion of the project, and is considered the primary permittee; or
- b) This person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions. This person is typically a contractor or a commercial builder who is hired by the primary permittee, and is considered a secondary permittee.

It is anticipated that at different phases of a construction project, different types of parties may satisfy the definition of "operator."

"Point source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include introduction of pollutants from non point-source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands or return flows from irrigated agriculture or agricultural storm water runoff.

A **Qualifying Storm Event** is one which is greater than 0.1 inches and that occurs after a period of at least 72 hours after any previous storm event with rainfall of 0.1 inches or greater and results in a discharge from the sediment basin(s). Instances of rainfall occurring within 10 hours of each other will be considered a single rainfall event. Ten -year, 24-hour rainfall event, 25-year, 24-hour rainfall event, and 100-year, 24-hour rainfall event are mean precipitation events with a probable recurrence interval of once in 10 years, or 25 years, or 100 years, respectively, as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May, 1961, or equivalent regional or state rainfall probability information developed from this source.

"Registered Engineer" and **"Registered Landscape Architect"** An engineer or landscape architect certified and registered by the Tennessee State Board of Architectural and Engineer Examiners pursuant to Section 62-202, Tennessee Code Annotated, to practice in Tennessee.

"Storm Water Pollution Prevention Plan"(SWPPP): A written plan required by this permit that includes site map(s), an identification of construction/contractor activities that could cause pollutants in the storm water, and a description of measures or practices to control these pollutants. It must be prepared and approved before construction begins. In order to effectively reduce erosion and sedimentation impacts, Best Management Practices (BMPs) must be designed, installed, and maintained during land disturbing activities. The SWPPP should be prepared in accordance with the Tennessee Erosion and Sediment Control Handbook. The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation, and maintenance of BMPs. The handbook is intended for use during the design and construction of projects that require erosion and sediment controls to protect waters of the state. It also aids in the development of SWPPPs and other reports, plans, or specifications required when participating in Tennessee's water quality regulations.

"Wet weather conveyances" are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that flow only in direct response to precipitation runoff in their immediate locality and whose channels are above the groundwater table and which do not support fish or aquatic life and are not suitable for drinking water supplies. (Rules and Regulations of the State of Tennessee, Chapter 1200-4-3-.04(3)).

"Wet Weather Flow" shall be construed to represent storm water runoff which, in combination with all process and/or non-process wastewater discharges, as applicable, is discharged during a qualifying storm event.

D. REPORTING

1. Monitoring Results

Monitoring results shall be recorded and submitted semi-annually to the Division of Water Pollution Control. Submittals shall be postmarked no later than 15 days after the anniversary of the issuance date of this permit. Any communication regarding compliance with the conditions of this permit must be sent to:

**TENNESSEE DEPT. OF ENVIRONMENT & CONSERVATION
DIVISION OF WATER POLLUTION CONTROL
COMPLIANCE REVIEW SECTION
401 CHURCH STREET
L & C ANNEX 6TH FLOOR
NASHVILLE TN 37243-1534**

Any report or other information must be signed and certified by a responsible corporate officer as defined in 40 CFR 122.22, a general partner or proprietor, or a principal municipal executive officer or ranking elected official, or his duly authorized representative. Such authorization must be submitted in writing and must explain the duties and responsibilities of the authorized representative.

2. Additional Monitoring by Permittee

If the permittee monitors any pollutant specifically limited by this permit more frequently than required at the location(s) designated, using approved analytical methods as specified herein, the results of such monitoring shall be included in the calculation and reporting of the values required in the DMR form. Such increased frequency shall also be indicated on the form.

3. Falsifying Results and/or Reports

Knowingly making any false statement on any report required by this permit or falsifying any result may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Water Pollution Control Act, as amended, and in Section 69-3-115 of the Tennessee Water Quality Control Act.

4. Outlier Data

Outlier data include analytical results that are probably false. The validity of results is based on operational knowledge and a properly implemented quality assurance program. False results may include laboratory artifacts, potential sample tampering, broken or suspect sample containers, sample contamination or similar demonstrated quality control flaw.

Outlier data are identified through a properly implemented quality assurance program, and according to ASTM standards (e.g. Grubbs Test, 'h' and 'k' statistics). Furthermore, outliers should be verified, corrected, or removed, based on further inquiries into the matter. If an outlier was verified (through repeated testing and/or analysis), it should remain in the preliminary data set. If an outlier resulted from a transcription or similar clerical error, it should be corrected and subsequently reported.

Therefore, only if an outlier was associated with problems in the collection or analysis of the samples and as such does not conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants (40 CFR §136), it can be removed from the data set and not reported on the Discharge Monitoring Report forms (DMRs). Otherwise, all results (including monitoring of pollutants more frequently than required at the location(s) designated, using approved analytical methods as specified in the permit) should be included in the calculation and reporting of the values required in the DMR form. You are encouraged to use "comment" section of the DMR form (or attach additional pages), in order to explain any potential outliers or dubious results.

E. SCHEDULE OF COMPLIANCE

Full compliance and operational levels shall be attained from the effective date of this permit.

PART II

A. GENERAL PROVISIONS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Water Quality Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

2. Duty to Reapply

Permittee is not authorized to discharge after the expiration date of this permit. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information and forms as are required to the Director of Water Pollution Control (the "Director") no later than 180 days prior to the expiration date. Such applications must be properly signed and certified.

3. Signatory Requirements

All applications, reports, or information submitted to the commissioner shall be signed and certified by the persons identified in 1200-4-5-.05(6)(a-c), making the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant

penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

All commercial builders, contractors and subcontractor must sign the certification statement found in Appendix 3. A copy of the signed certification statement must be kept at the construction site.

4. Right of Entry

The permittee shall allow the Director, the Regional Administrator of the U.S. Environmental Protection Agency, or their authorized representatives, upon the presentation of credentials:

- a.** To enter upon the permittee's premises where an effluent source is located or where records are required to be kept under the terms and conditions of this permit, and at reasonable times to copy these records;
- b.** To inspect at reasonable times any monitoring equipment or method or any collection, treatment, pollution management, or discharge facilities required under this permit; and
- c.** To sample at reasonable times any discharge of pollutants.

5. Availability of Reports

Except for data determined to be confidential under Section 308 of the Federal Water Pollution Control Act, as amended, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division of Water Pollution Control. As required by the Federal Act, effluent data shall not be considered confidential.

6. Proper Operation and Maintenance

- a.** The permittee shall at all times properly operate and maintain all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory and process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. Backup continuous pH and flow monitoring equipment are not required.
- b.** Dilution water shall not be added to comply with effluent requirements to achieve BCT, BPT, BAT and or other technology-based effluent limitations such as those in State of Tennessee Rule 1200-4-5-.09.

7. Treatment Facility Failure

The permittee, in order to maintain compliance with this permit, shall control production, all discharges, or both, upon reduction, loss, or failure of the treatment facility, until the facility is restored or an alternative method of treatment is provided. This requirement applies in such situations as the reduction, loss, or failure of the primary source of power.

8. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

9. Severability

The provisions of this permit are severable. If any provision of this permit due to any circumstance, is held invalid, then the application of such provision to other circumstances and to the remainder of this permit shall not be affected thereby.

10. Other Information

If the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, then he shall promptly submit such facts or information.

B. CHANGES AFFECTING THE PERMIT

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a.** The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
- b.** The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).

2. Permit Modification, Revocation, or Termination

- a.** This permit may be modified, revoked and reissued, or terminated for cause as described in 40 CFR 122.62 and 122.64, Federal Register, Volume 49, No. 188 (Wednesday, September 26, 1984), as amended.
- b.** The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

c. If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established for any toxic pollutant under Section 307(a) of the Federal Water Pollution Control Act, as amended, the Director shall modify or revoke and reissue the permit to conform to the prohibition or to the effluent standard, providing that the effluent standard is more stringent than the limitation in the permit on the toxic pollutant. The permittee shall comply with these effluent standards or prohibitions within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified or revoked and reissued to incorporate the requirement.

d. The filing of a request by the permittee for a modification, revocation, reissuance, termination, or notification of planned changes or anticipated noncompliance does not halt any permit condition.

3. Change of Ownership

This permit may be transferred to another party (provided there are neither modifications to the facility or its operations, nor any other changes which might affect the permit limits and conditions contained in the permit) by the permittee if:

- a. The permittee notifies the Director of the proposed transfer at least 30 days in advance of the proposed transfer date;
- b. The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage, and liability between them; and
- c. The Director, within 30 days, does not notify the current permittee and the new permittee of his intent to modify, revoke or reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

Pursuant to the requirements of 40 CFR 122.61, concerning transfer of ownership, the permittee must provide the following information to the division in their formal notice of intent to transfer ownership: 1) the NPDES permit number of the subject permit; 2) the effective date of the proposed transfer; 3) the name and address of the transferor; 4) the name and address of the transferee; 5) the names of the responsible parties for both the transferor and transferee; 6) a statement that the transferee assumes responsibility for the subject NPDES permit; 7) a statement that the transferor relinquishes responsibility for the subject NPDES permit; 8) the signatures of the responsible parties for both the transferor and transferee pursuant to the requirements of 40 CFR 122.22(a), "Signatories to permit applications"; and, 9) a statement regarding any proposed modifications to the facility, its operations, or any other changes which might affect the permit limits and conditions contained in the permit.

4. Change of Mailing Address

The permittee shall promptly provide to the Director written notice of any change of mailing address. In the absence of such notice the original address of the permittee will be assumed to be correct.

5. Typical Construction Site Operators

a. Owner/Developer

Ft. Campbell is the owner/developer. The owner/developer shall designate a person that has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. An owner/developer's responsibility to comply with requirements of this permit extends until:

- 1) permit coverage is terminated in accordance with requirements of part Part II.B.2 above; or
- 2) operational or design control of the entire site (including, but not limited to, infrastructure, common areas, storm water drainage structures, sediment treatment basin, etc.) is transferred to one or more new owner(s)/operator(s).

b. Commercial builders

A commercial builder who purchases one or more lots from an owner/developer (initial permittee) for the purpose of constructing and selling a structure (e.g., residential house, non-residential structure, commercial building, industrial facility, golf courses, etc.) and has design or operational control over construction plans and specifications becomes a primary permittee for that portion of the site. The owner/developer or a lot owner to build a structure for an end user may also hire the commercial builder. In this case, the commercial builder is considered a new operator and must sign and submit the original of the certification statement found in Appendix 3 to the Nashville Field Office. A copy of the signed certification found in appendix 3 must be kept at the construction site.

c. Contractors

A contractor is considered a secondary permittee. This person has day-to-day operational control of those activities at a project, which are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., contractor is authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

A contractor is typically hired by the initial permittee or by the commercial builders. This person may include, but is not limited to a general contractor, grading contractor, erosion control contractor, sub-contractor responsible for any land disturbing activities and/or erosion prevention and sediment control (EPSC) implementation/maintenance, commercial builder hired by the owner/developer, etc. The contractor must sign and submit the original of Appendix 3 to the Nashville Field Office. A copy of the signed certification form found in Appendix 3 must be kept at the construction site.

C. NONCOMPLIANCE

1. Effect of Noncompliance

All discharges shall be consistent with the terms and conditions of this permit. Any permit noncompliance constitutes a violation of applicable State and Federal laws and is grounds for enforcement action, permit termination, permit modification, or denial of permit reissuance.

2. Reporting of Noncompliance

a. 24-Hour Reporting

In the case of any noncompliance which could cause a threat to public drinking supplies, or any other discharge which could constitute a threat to human health or the environment, the required notice of non-compliance shall be provided to the Division of Water Pollution Control in the appropriate regional Field Office within 24-hours from the time the permittee becomes aware of the circumstances. (The regional Field Office should be contacted for names and phone numbers of environmental response personnel).

A written submission must be provided within five calendar days of the time the permittee becomes aware of the circumstances, unless the Director on a case-by-case basis waives this requirement. The permittee shall provide the Director with the following information:

- i. A description of the discharge and cause of noncompliance;
- ii. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and
- iii. The steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. Scheduled Reporting

For instances of noncompliance which are not reported under subparagraph 2.a. above, the permittee shall report the noncompliance on the Discharge Monitoring Report. The report shall contain all information concerning the steps taken, or planned, to reduce, eliminate, and prevent recurrence of the violation and the anticipated time the violation is expected to continue.

3. Overflow

- a. "**Overflow**" means the discharge to land or water of wastes from any portion of the collection, transmission, or treatment system other than through permitted outfalls.
- b. Overflows are prohibited.

4. Rain Event Greater than Design Criteria or Upset

- a. "**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment

facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- i.** An upset occurred and that the permittee can identify the cause(s) of the upset;
- ii.** The permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures;
- iii.** The permittee submitted information required under "Reporting of Noncompliance" within 24-hours of becoming aware of the upset (if this information is provided orally, a written submission must be provided within five days); and
- iv.** The permittee complied with any remedial measures required under "Adverse Impact."

5. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

6. Bypass

- a.** "**Bypass**" is the intentional diversion of wastewater away from any portion of a treatment facility or structural BMP. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b.** Bypasses are prohibited unless the following 3 conditions are met:
 - i.** The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii.** There are not feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down-time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise

of reasonable engineering judgment to prevent a bypass, which occurred during normal periods of equipment down-time or preventative maintenance;

- iii. The permittee submits notice of an unanticipated bypass to the Division of Water Pollution Control in the appropriate environmental assistance center within 24-hours of becoming aware of the bypass (if this information is provided orally, a written submission must be provided within five days). When the need for the bypass is foreseeable, prior notification shall be submitted to the Director, if possible, at least 10 days before the date of the bypass.
- c. Bypasses not exceeding limitations are allowed **only** if the bypass is necessary for essential maintenance to assure efficient operation. All other bypasses are prohibited. Allowable bypasses not exceeding limitations are not subject to the reporting requirements of 6.b.iii, above.

D. LIABILITIES

1. Civil and Criminal Liability

Except as provided in permit conditions for "**Bypassing**," "**Overflow**," and "**Upset**," nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge of wastewater to any surface or subsurface waters. Additionally, notwithstanding this Permit, it shall be the responsibility of the permittee to conduct its wastewater treatment and/or discharge activities in a manner such that public or private nuisances or health hazards will not be created.

2. Liability Under State Law

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or the Federal Water Pollution Control Act, as amended.

PART III

OTHER REQUIREMENTS

A. TOXIC POLLUTANTS

The permittee shall notify the Division of Water Pollution Control as soon as it knows or has reason to believe:

- 1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic substance(s) (listed at 40 CFR 122, Appendix D, Table II

and III) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- a. One hundred micrograms per liter (100 ug/l);
- b. Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
- c. Five (5) times the maximum concentration value reported for that pollutant(s) in the permit application in accordance with 122.21(g)(7); or
- d. The level established by the Director in accordance with 122.44(f).

2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- a. Five hundred micrograms per liter (500 ug/l);
- b. One milligram per liter (1 mg/L) for antimony;
- c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 122.21(g)(7); or
- d. The level established by the Director in accordance with 122.44(f).

B. REOPENER CLAUSE

If an applicable standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(B)(2), and 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked and reissued to conform to that effluent standard or limitation.

C. PLACEMENT OF SIGNS

Within sixty (60) days of the effective date of this permit, the permittee shall place and maintain a sign(s) at each outfall and any bypass/overflow point in the collection system. For the purposes of this requirement, any bypass/overflow point that has discharged five (5) or more times in the last year must be so posted. The sign(s) should be clearly visible to the public from the bank and the receiving stream or from the nearest public property/right-of-way, if applicable. The minimum sign size should be two feet by two feet (2' x 2') with one inch (1") letters. The sign should be made of durable material and have a white background with black letters.

The sign(s) are to provide notice to the public as to the nature of the discharge and, in the case of the permitted outfalls, that the discharge is regulated by the Tennessee Department of Environment and Conservation, Division of Water Pollution Control. The following is given as an example of the minimal amount of information that must be included on the sign:

CONSTRUCTION STORM WATER RUNOFF
Ft. Campbell
(Permittee's Phone Number)
NPDES Permit NO. TN0080314
TENNESSEE DIVISION OF WATER POLLUTION CONTROL
1-888-891-8332 ENVIRONMENTAL FIELD OFFICE - Nashville

D. ANTIDegradation

Pursuant to the Rules of the Tennessee Department of Environment and Conservation, Chapter 1200-4-3-.06, titled "Tennessee Antidegradation Statement," and in consideration of the Department's directive in attaining the greatest degree of effluent reduction achievable in municipal, industrial, and other wastes, the permittee shall further be required, pursuant to the terms and conditions of this permit, to comply with the effluent limitations and schedules of compliance required to implement applicable water quality standards, to comply with a State Water Quality Plan or other State or Federal laws or regulations, or where practicable, to comply with a standard permitting no discharge of pollutants.

E. PROHIBITION OF NON-STORM WATER DISCHARGES

This permit does not authorize the discharge of non-storm water

PART IV

STORM WATER POLLUTION PREVENTION PLAN

A comprehensive SWPPP must be prepared. The permittee must implement the SWPPP as written from commencement of construction activity until final stabilization is complete, or until the permittee does not have design or operational control of any portion of the construction site. Requirements for termination of site coverage are provided. Monitoring of storm water runoff from storm water outfalls will be required for Flow, Total Suspended Solids (TSS), and pH. In order to assist the permittee in the evaluation of the effectiveness of the SWPPP, benchmark values developed are provided.

Parameters of Concern	Benchmark
<i>Flow</i>	
<i>Total Suspended Solids (TSS)</i>	<i>150 mg/L</i>
<i>pH (range)</i>	<i>6.0 - 9.0</i>

At least one site-specific SWPPP must be developed for each construction project or site covered by this permit. Such SWPPP must be prepared in accordance with good engineering practices and the latest edition of the Tennessee Erosion and Sediment Control Handbook. The handbook is designed to provide information to planners, developers, engineers, and

contractors on the proper selection, installation, and maintenance of Best Management Practices (BMPs). The SWPPP must:

- a) identify all potential sources of pollution which are likely to affect the quality of storm water discharges from the construction site;
- b) describe practices to be used to reduce pollutants in storm water discharges from the construction site; and
- c) assure compliance with the terms and conditions of this permit.

Once a definable area has been finally stabilized, the permittee may mark this on the SWPPP and no further SWPPP or inspection requirements apply to that portion of the site (e.g., earth-disturbing activities around one of three buildings in a complex are done and the area is finally stabilized, one mile of a roadway or pipeline project is done and finally stabilized, etc).

For more effective coordination of Best Management Practices (BMPs) and opportunities for cost sharing, a cooperative effort by the different operators at a site to prepare and participate in a comprehensive SWPPP is encouraged. Primary permittees at a site may, but are not required, to develop separate SWPPPs that cover only their portion of the project. In instances where there is more than one SWPPP for a site, the permittees must ensure the storm water discharge controls and other measures are compatible with one another and do not prevent another operator from complying with permit conditions. The comprehensive SWPPP developed and submitted by the initial permittee (typically owner/developer) must assign responsibilities to various operators (typically contractors) and coordinate all BMPs at the construction site. Assignment and coordination can be done by name or by job title.

The discharger will develop, document and maintain a storm water pollution prevention plan (SWPPP). The plan shall be signed by either a principal executive officer of a corporation, the owner or proprietor of a sole proprietorship, or a partner or general partner of a partnership. The SWPPP developed and implemented shall be site specific to the permitted facility with regard to the general terms and conditions outlined in the guidance manuals cited herein, and, at a minimum, shall contain the following items:

A. REGISTERED ENGINEER OR LANDSCAPE ARCHITECT REQUIREMENT

The narrative portion of the SWPPP may be prepared by an individual that has a working knowledge of erosion prevention and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC). For SWPPPs that include preparation of plans and specifications for any building or structure, including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations, those SWPPPs shall be prepared by a licensed professional engineer or landscape architect in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 and the rules of the Tennessee Architectural and Engineering Examiners Board. Engineering design of sediment basins and other sediment controls must be included in SWPPPs for construction sites involving disturbance of 10 or more acres. This requirement is in addition to any requirements of Title 62, Chapter 2 and the rules promulgated thereunder, including without limitation, any definition of the scope of practice of engineering or landscape architecture.

B. SIGNATURE REQUIREMENTS, PLAN REVIEW AND MAKING PLANS AVAILABLE

The SWPPP shall be signed by the operator(s) in accordance with subpart I.D, and if applicable, certified according to requirements in section. A copy of the SWPPP shall be retained on-site at the location.

The permittee shall make updated plans and inspection reports available upon request to the director, local agency approving erosion prevention and sediment control plan, grading plans, or storm water management plans.

The permittee shall post the permit near the main entrance of the construction site accessible to the public with the following information:

- a) a copy of the permit for the construction project;
- b) name, company name, E-mail address (if available), telephone number and address of the project site owner or a local contact person;
- c) a brief description of the project; and
- d) the location of the SWPPP if the site is inactive or does not have an on-site location to store the plan.

The permit must be maintained in a legible condition. If posting this information near a main entrance is infeasible due to safety concerns, or not accessible to the public, the permit shall be posted in a local public building. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the permit must be placed in a publicly accessible location near where construction is actively underway and moved as necessary. This permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site. This permit does not require that permittees allow members of the public access to a construction site.

C. KEEPING PLANS CURRENT

The permittee must modify and update the SWPPP:

- a) whenever there is a change in the scope of the project, which would be expected to have a significant effect on the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the SWPPP;
- b) whenever inspections or investigations by site operators, local, state or federal officials indicate the SWPPP is proving ineffective in eliminating or significantly minimizing pollutants from sources identified under this permit, or is otherwise not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity;
- c) to identify any new operator (typically contractor and/or subcontractor) as needed to reflect operational or design control that will implement a measure of the SWPPP and
- d) to include measures necessary to prevent a negative impact to legally protected state or federally listed fauna or flora (or species proposed for such protection). Amendments to the SWPPP may be reviewed by the division, the EPA or an authorized regulatory agency.

D. COMPONENTS OF THE SWPPP

The SWPPP shall include the following items:

1. Site description

- a) a description of all construction activities at the site (not just grading and street construction);
- b) the intended sequence of major activities which disturb soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc.);
- c) estimates of the total area of the site and the total area that is expected to be disturbed by excavation, grading, filling, or other construction activities;
- d) a description of the topography of the site including an estimation of the percent slope and the variation in percent slope found on the site; such estimation should be on a basis of a drainage area serving each outfall, rather than an entire project;
- e) any data describing the soil (data may be referenced or summarized) and how the soil type will dictate the needed control measures and the expected quality of any discharge from the site;
- f) an estimate of the runoff coefficient of the site after construction activities are completed and how the runoff will be handled to prevent erosion at the permanent outfall and receiving stream;
- g) an erosion prevention and sediment control map of the site with the proposed construction area clearly outlined. The map should indicate the boundaries of the permitted area, drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the SWPPP, the location of areas where stabilization practices are expected to occur, surface waters including wetlands, sinkholes, and careful identification on the site map of outfall points intended for coverage under the general permit for storm water discharges from the site;
- h) a description of any discharge associated with industrial activity other than construction storm water that originates on site and the location of that activity and its permit number;
- i) identification of any stream or wetland on or adjacent to the project, a description of any anticipated alteration of these waters and the permit number or the tracking number of the Aquatic Resources Alteration Permit or Section 401 Certification issued for the alteration;
- j) the name of the receiving water(s), and approximate size and location of affected wetland acreage at the site;
- k) if applicable, identify and outline the buffer zones established to protect waters of the state located within the boundaries of the project;
- l) for projects which will be subdivided, such as residential developments or industrial parks, the developer/owner must describe how he will prevent erosion and/or control any sediment from portions of the property that will be sold prior to completion of construction; once the property is sold, new operator must obtain

- coverage under this permit, and assume operational control and responsibility of that portion of the site;
- m) for projects of more than 50 acres, the construction phases must be described; and
- n) if only a portion of the total acreage of the construction site is to be disturbed, then the protections employed to limit the disturbance must be discussed, i.e., caution fence, stream side buffer zones, etc.

2. Description of storm water runoff controls

The SWPPP shall include a description of appropriate erosion prevention and sediment controls and other Best Management Practices (BMPs) that will be implemented at the construction site. The SWPPP must clearly describe each major activity which disturbs soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc.):

- a) appropriate control measures and the general timing for the measures to be implemented during construction activities; and
- b) which permittee is responsible for implementation of which controls.

The SWPPP must include erosion control drawings showing the approximate location of each control measure along with a description of the timing during the construction process for implementing each measure (e.g., prior to the start of earth disturbance, as the slopes are altered and after major grading is finished).

3. Erosion prevention and sediment controls

a. General criteria and requirements

- a) The construction-phase erosion prevention controls shall be designed to minimize the dislodging and suspension of soil in water. Sediment controls shall be designed to retain mobilized sediment on site.
- b) All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications (where applicable) and good engineering practices. All control measures selected must be able to slow runoff so that rill and gully formation is prevented. When steep slopes and/or fine particle soils are present at the site, additional physical or chemical treatment of storm water runoff may be required, and must be fully described. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for relevant site situations.
- c) If permanent or temporary vegetation is to be used as a control measure, then the timing of the planting of the vegetation cover must be discussed in the SWPPP. Delay in planting cover vegetation until winter months or dry months should be avoided, if possible.
- d) If sediment escapes the construction site, off-site accumulations of sediment that have not reached a stream must be removed at a frequency sufficient to minimize offsite impacts (e.g., fugitive sediment that has escaped the construction site and has collected in a street must be removed so that it is not subsequently washed into storm sewers and streams by the next rain and/or so

that it does not pose a safety hazard to users of public streets). Permittees shall not initiate remediation/restoration of a stream without consulting the division first. This permit does not authorize access to private property. Arrangements concerning removal of sediment on adjoining property must be settled by the permittee with the adjoining landowner.

- e) Sediment should be removed from sediment traps, silt fences, sedimentation ponds, and other sediment controls as necessary, and must be removed when design capacity has been reduced by 50%.
- f) Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events or before being carried off of the site by wind (e.g., forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, daily pick-up, etc.). After use, materials used for erosion prevention and sediment control should be removed or otherwise prevented from becoming a pollutant source for storm water discharges.
- g) Offsite erodible material storage areas (also including overburden and stockpiles of dirt, etc.) used primarily by the permitted project are considered a part of the project and shall be addressed in the SWPPP and included in the fee calculation.
- h) Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 10 days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
- i) Clearing and grubbing must be held to the minimum necessary for grading and equipment operation.
- j) Construction must be sequenced to minimize the exposure time of graded or denuded areas.
- k) Construction must be phased for projects in which over 50 acres of soil will be disturbed. Areas of the completed phase must be stabilized within 15 days. No more than 50 acres of active soil disturbance is allowed at any time during the construction project.
- l) Erosion prevention and sediment control measures must be in place and functional before earth moving operations begin, and must be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the workday, but must be replaced at the end of the workday.
- m) The following records shall be maintained on or near site: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; the dates when stabilization measures are initiated; inspection records and rainfall records.
- n) Permittees shall maintain a rain gauge and daily rainfall records at the site, or use a reference site for a record of daily amount of precipitation.

b. Stabilization practices

The SWPPP shall include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Site plans should comply with buffer zone requirements applicable, in which construction activities, borrow and/or fill are prohibited. Stabilization practices may include:

temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Use of impervious surfaces for final stabilization in lieu of a permanent vegetative cover should be avoided where practicable. No stabilization, erosion control or sediment treatment measures are to be installed in a stream without obtaining an Aquatic Resource Alteration Permit (ARAP).

Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site (or a phase of the project) must be completed not later than 15 days after the construction activity in that portion of the site has temporarily or permanently ceased. In the following situations, temporary stabilization measures are not required:

- a) where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions, stabilization measures shall be initiated as soon as practicable; or
- b) where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 15 days.

Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall replace any temporary measures as soon as practicable. Unpacked gravel containing fines (silt and clay sized particles) or crusher runs will not be considered a non-eroding surface.

c. *Structural practices*

The SWPPP shall include a description of structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural controls shall not be placed in streams or wetlands except as authorized by a section 404 permit and/or Aquatic Resource Alteration Permit.

Erosion prevention and sediment control measures shall be designed according to the size and slope of disturbed drainage areas with the goal of detaining runoff and trapping sediment. In addition, erosion prevention and sediment controls shall be designed to control the rainfall and runoff from a 2 year, 24 hour storm, as a minimum. When clay and other fine particle soils are present at the construction site, chemical treatment may be used to minimize amount of sediment being discharged.

For an outfall in a drainage area of a total of 10 or more acres, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from a 2 year, 24 hour storm and runoff from each acre drained, or equivalent control measures, shall be provided until final stabilization of the site. Where an equivalent control measure is substituted for a sediment retention basin, the equivalency must be justified to the division. Runoff from any undisturbed acreage should be diverted around the disturbed area and the sediment basin. Diverted runoff can be omitted from the volume calculation. Sediment storage expected from the disturbed areas must be included and a marker installed signifying the need for cleanout of the basin.

All calculations of drainage areas, runoff coefficients and basin volumes must be provided in the SWPPP. The discharge structure from a sediment basin must be designed to retain sediment during the lower flows. Muddy water to be pumped from excavation and work areas must be held in settling basins or filtered or chemically treated prior to its discharge into surface waters. Water must be discharged through a pipe, well-grassed or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation. Discharged water must not cause an objectionable color contrast with the receiving stream.

4. Storm water management

The SWPPP shall include a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed.

For projects discharging to waters considered impaired by sediment or habitat alteration due to in-channel erosion, the SWPPP shall include a description of measures that will be installed during the construction process to control pollutants and any increase in the volume of storm water discharges that will occur after construction operations have been completed. For steep slope sites, the SWPPP shall also include a description of measures that will be installed to dissipate the volume and energy of the storm water runoff to pre-development levels.

This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed, the site has undergone final stabilization, and the permit coverage has been terminated. Permittees are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with construction activity have been eliminated from the site. All permittees are encouraged to limit the amount of post construction runoff, if not required by local building regulations, in order to minimize in-stream channel erosion in the receiving stream.

Construction storm water runoff management practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices).

Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (no significant changes in the hydrological regime of the receiving water). The SWPPP shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels.

5. Inspection Schedule, Inspector training and certification

Inspectors must have successfully completed the "Fundamentals of Erosion Prevention and Sediment Control" course, or an equivalent course, for individuals involved in land-disturbing

activities which provides a working knowledge of erosion prevention and sediment controls. An engineer or a landscape architect that prepared the drainage and structure design portion of the SWPPP may also conduct the required inspections.

- a) Inspections described in paragraphs b, c and d below, shall be performed at least twice every calendar week. Inspections shall be performed at least 72 hours apart. Where sites or portion(s) of construction sites have been temporarily stabilized, or runoff is unlikely due to winter conditions (e.g., site covered with snow or ice), such inspection only has to be conducted once per month until thawing results in runoff or construction activity resumes. Inspections requirements do not apply to definable areas that have been finally stabilized. Written notification of the intent to conduct only monthly inspections and the justification for such request must be submitted to the local Environmental Field Office, and division's Nashville Central Office.
- b) Qualified personnel (provided by the permittee or cooperatively by multiple permittees) shall inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, locations where vehicles enter or exit the site, and each outfall.
- c) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion prevention and sediment control measures identified in the SWPPP shall be observed to ensure that they are operating correctly.
- d) Outfall points (where discharges leave the site or enter waters of the state) shall be inspected to determine whether erosion prevention and sediment control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
- e) Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event if possible, but in no case more than 7 days after the need is identified.
- f) Based on the results of the inspection, the site description identified in the SWPPP and pollution prevention measures identified in the SWPPP of this permit shall be revised as appropriate, but in no case later than 7 days following the inspection. Such modifications shall provide for timely implementation of any changes to the SWPPP, but in no case later than 14 days following the inspection.
- g) Inspections shall be documented and include the scope of the inspection, name(s) and title of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan (including the location(s) of discharges of sediment or other pollutants from the site and of any control device that failed to operate as designed or proved inadequate for a particular location), and actions taken. Inspection documentation will be maintained on site and made available upon request. Inspection reports must be submitted to the division within 10 days of the request.

6. Other items needing control

- a) No solid materials, including building materials, shall be placed in waters of the state, except as authorized by a section 404 permit and/or Aquatic Resource Alteration Permit.
- b) Off-site vehicle tracking of sediments and the generation of dust shall be minimized. A stabilized construction access (a point of entrance/exit to a construction site) shall be described and implemented, as needed, to reduce the tracking of mud and dirt onto public roads by construction vehicles.
- c) For installation of any waste disposal systems on site, or sanitary sewer or septic system, the SWPPP shall provide for the necessary sediment controls. Permittees must also comply with applicable state and/or local waste disposal, sanitary sewer or septic system regulations for such systems to the extent these are located within the permitted area.
- d) The SWPPP shall include a description of construction and waste materials expected to be stored on-site with updates as appropriate. The SWPPP shall also include a description of controls used to reduce pollutants from materials stored on site, including storage practices to minimize exposure of the materials to storm water, and spill prevention and response.
- e) A description of storm water sources from areas other than construction and a description of controls and measures that will be implemented at those sites.

A description of measures necessary to prevent “taking” of legally protected state or federal listed threatened or endangered aquatic fauna and/or critical habitat (if applicable). The permittee must describe and implement such measures to maintain eligibility for coverage under this permit.

RATIONALE

Ft. Campbell
NPDES PERMIT NO. TN0080314
Clarksville, Montgomery County, Tennessee

Permit Writer: Jim McAdoo

A. DISCHARGER

Ft. Campbell
2nd Brigade Combat Team Complex
Clarksville, Montgomery County, Tennessee

Official Contact Person:

Mr. Dan Etson
Fort Campbell Water Program Manager
Fort Campbell, KY
270-798-9784

Nature of Business:

Phased construction of barracks, motor pools,
cafeteria, administration and other buildings

SIC Code(s): 1542 - General Contractors – Nonresidential
Buildings, Other Than Industrial Buildings
and Warehouses

Industrial Classification: Secondary without ELG

Discharger Rating: Minor

B. PERMIT STATUS

Application for permit received December 13, 2007

Watershed Scheduling

Environmental Field Office: Nashville
Primary Longitude: -87.46666 Primary Latitude: 35.6000
Hydrocode: 5130206 Watershed Group: 4
Watershed Identification: Red River
Target Reissuance Year: 2009

C. FACILITY DISCHARGES AND RECEIVING WATERS

Ft. Campbell proposes to construct, in phases over the next six years, the 2nd Brigade Combat Team Complex on a 183 acre site of the 105,000 acres facility. Four phases of the expansion are planned to begin simultaneously in 2008 with the remaining phases started between 2009 and 2012. Storm water discharges from all the phases, outfalls SW1 through SW16, would go into wet weather conveyances to Fletcher's Fork and Little West Fork Creeks. Appendix 1 summarizes discharges and the receiving stream information.

D. APPLICABLE EFFLUENT LIMITATIONS GUIDELINES

There are no effluent guidelines for the discharges from this operation. Standards of performance are therefore established in accordance with existing state regulations using available treatability information.

E. PREVIOUS PERMIT LIMITS AND MONITORING REQUIREMENTS

Because this is a new permit application, no previous permit limits are available.

F. HISTORICAL MONITORING AND INSPECTION

Because this is a new permit application, there are no historical monitoring or inspection records.

G. NEW PERMIT LIMITS AND MONITORING REQUIREMENTS

The proposed new permit limits have been selected by determining a technology-based limit and evaluating if that limit protects the water quality of the receiving stream. If the technology-based limit would cause violations of water quality, the water quality-based limit is chosen. The technology-based limit is determined from EPA effluent limitations guidelines if applicable (see Part IV); or from State of Tennessee maximum effluent limits for effluent limited segments per Rule 1200-4-5-.08; or by way of operational and/or treatability data. Furthermore, effluent limitations in this permit must comply with any approved Total Maximum Daily Load (TMDL) studies. Appendix 2 lists all proposed effluent limitations and monitoring requirements to be included in the new permit.

The storm water discharges associated with these activities are defined in 40 CFR 122.26(b)(14) construction category (x). Effluent limitations for storm water outfalls SW1 through SW16 will represent only wet weather discharges from this site. Dry weather discharges are not authorized by this permit. The definition of wet weather flow can be found in Part I, Section C of this permit.

Outfalls SW1 through SW16

Monitoring of flow quantifies the load of pollutants to the stream. Flow shall be reported in Million Gallons per Day (MGD) and monitored at the time of sample collection.

Storm water runoff parameters to be monitored and reported were determined by reviewing the Tennessee Storm Water Multi-Sector General Permit for Industrial Activities (TMSP) and the Storm Water Discharges Associated with Construction Activities NPDES permit (CGP).

There are no effluent guidelines for storm water discharges from the Ft. Campbell facility. The new permit will not establish effluent limitations, but will require reporting of effluent characteristics for storm water outfalls SW1 through SW16. Nevertheless, certain "Benchmarks" will be established for each of the monitored parameters.

The division is not assigning limits for these parameters at this time since it is the intent of the division that the permittee institutes a Storm Water Pollution Prevention Plan (SWPPP) in order to minimize the discharge of these pollutants from storm water outfalls. It is the opinion of the division that the best method for dealing with potential pollution associated with storm water discharges from the Ft. Campbell facility is through implementation of an aggressive SWPPP, coupled with discharge monitoring to verify SWPPP effectiveness. Monitoring of storm water runoff from storm water outfalls will be required for Flow, Total Suspended Solids (TSS), and pH. In order to assist the permittee in the evaluation of the effectiveness of the SWPPP, benchmark values developed are provided.

Parameters of Concern	Benchmark
<i>Flow</i>	
<i>Total Suspended Solids (TSS)</i>	<i>150 mg/L</i>
<i>pH (range)</i>	<i>6.0 - 9.0</i>

Generally, for storm water runoff samples, a grab sample is considered adequate for effluents from holding ponds or other impoundments with a retention period of greater than 24-hours (Instructions - EPA Form 3510-2F: Application for Permit to Discharge Storm Water Associated with Industrial Activity, Item VII, General Instructions, Page I-3).

The division recognizes that a "first flush" sample would be the most accurate representation of the maximum daily value for various pollutants in the storm water runoff. Furthermore, storm water sampling requirements included in the Tennessee Multi-Sector General Permit require analysis of grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. Every effort should be made to collect a "first flush" sample representative of the daily maximum values for sampled parameters.

The new permit will contain a Storm Water Pollution Prevention Plan (SWPPP) developed to regulate storm water runoff. This SWPPP is meant to ensure that runoff from the site is not a significant source of pollution to the receiving stream. The discharger will develop, document and maintain the SWPPP. The effectiveness of this SWPPP will be investigated after the results of the storm water runoff monitoring have been submitted. At that time, should the results so dictate, the division maintains the authority to institute specific numeric limitations for the monitored parameters.

H. ANTIDEGRADATION

Tennessee's Antidegradation Statement is found in the Rules of the Tennessee Department of Environment and Conservation, Chapter 1200-4-3-.06 and in consideration of the department's directive in attaining the greatest degree of effluent reduction achievable in municipal, industrial, and other wastes, the permittee shall further be required, pursuant to the terms and conditions of this permit, to comply with the effluent limitations and schedules of compliance required to implement applicable water quality standards, to comply with a State Water Quality Plan or other State or Federal laws or regulations, or where practicable, to comply with a standard permitting no discharge of pollutants. This statement outlines the criteria for the Exceptional Tennessee Waters and Outstanding National Resource Waters (ONRWs), as designated by the Water Quality Control Board. Other surface waters not specifically identified and/or designated as either Exceptional Tennessee Waters or ONRWs are evaluated on the basis of 1200-4-3-.06(2) and (3) and are referred to as waters with either unavailable conditions or available conditions. Waters with unavailable conditions may be identified by the division as not meeting existing criteria and appears on a list of impacted waters per Section 303(d) of the Clean Water Act.

The division has not made a stream tier determination of the receiving waters associated with the subject discharge(s). Additionally, this water is fully supporting its designated uses. The department has maintained, and shall continue to assess, the water quality of the stream to assure that the water quality is adequate to protect the existing uses of the stream fully, and to assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for non-point source control.

I. PERMIT DURATION

The proposed limitations meet the requirements of Section 301(b)(2)(A), (C), (D), (E), and (F) of the Clean Water Act as amended. It is the intent of the division to organize the future issuance and expiration of this particular permit such that other permits located in the same watershed and group within the State of Tennessee will be set for issuance and expiration at the same time. In order to meet the target reissuance date for the watershed and following the directives for the Watershed Management Program initiated in January, 1996, the permit will be issued for a 5 year term.

APPENDIX 1

FACILITY DISCHARGES AND RECEIVING WATERS

FACILITY DISCHARGES AND RECEIVING WATERS																																														
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<p>Treatment: Chemical oxidation, chemical precipitation, sedimentation, aerated lagoons, flocculation, ammonia stripping</p> <p>* Reference: Flow Duration and Low Flows of Tennessee Streams through 1992 by George S. Law and Jess D. Weaver. Water Resources Investigations Report 95-4293 prepared by the U.S. Geological Survey in Cooperation with the Tennessee Department of Environment and Conservation and the Tennessee Valley Authority. Nashville, Tennessee, 1996, p. 66.</p>																																														

The following table lists the storm water outfalls with the project phases.

Outfall	Project Number	Construction Year
1	68783	2008
2	64903, 61055	2008, 2012
3	64903, 58511, 61055	2008, 2011, 2012
4	64903, 58511	2008, 2011
5	64903, 58511	2008, 2011
6	64903, 58511	2008, 2011
7	64903	2008
8	65147	2008
9	65147 (1)	2008
10	65147 (1)	2008
11	65147 (1)	2008
12	65147 (1)	2008
13	65147	2008
14	68877, 58511	2008, 2011
15	Phase 3	2008
16	Phase 4	2011

(1) This project may not impact this outfall.

APPENDIX 2

NEW PERMIT GUIDELINES AND MONITORING REQUIREMENTS

PERMIT						
For outfalls SW1 through SW16						
EFFLUENT CHARACTERISTIC	EFFLUENT GUIDELINES				MONITORING REQUIREMENTS	
	MONTHLY		DAILY		MSRMNT. FRQNCY.	SAMPLE TYPE
	AVG. CONC.	AVG. AMNT.	MAX. CONC.	MAX. AMNT.		
	(mg/l)	(lb/day)	(mg/l)	(lb/day)		
FLOW	Report (MGD) *		Report (MGD) *		Semi-annually	Estimate
pH**	Range 6.0 - 9.0				Semi-annually	Grab
FLOATING MATERIAL, COLOR, FOAM OR OIL SHEEN	REPORT				Semi-annually	Visual
TOTAL SUSPENDED SOLIDS (TSS)	--	--	150.0	--	Semi-annually	Grab

(1) Only storm water outfalls from active construction sites will be sampled during this permit

* Flow shall be reported in Million Gallons per Day (MGD).

** pH analyses shall be performed within fifteen (15) minutes of sample collection.